PTO-1390 (Rev. 07-2005)

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Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of Information unless it displays a Wall OMS control number. TRANSMITTAL LETTER TO THE UNITED STATES ATTORNEY'S DOCKET NUMBER 112857-608 DESIGNATED/ELECTED OFFICE (DO/EO/US) U.S. APPLICATION NO. (If known, see 37 CFR 1.5) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371 INTERNATIONAL APPLICATION NO. INTERNATIONAL FILING DATE PRIORITY DATE CLAIMED PCT/JP2005/005312 March 19, 2004 312 March 16, 2005 March 19, 2004
STIMULI-RESPONSIVE HYDROGEL, PRODUCTION METHOD OF STIMULI-RESPONSIVE HYDROGEL, TITLE OF INVENTION AND POLYMER ACTUATOR USING STIMULI-RESPONSIVE HYDROGEL APPLICANT(S) FOR DO/EO/US Hidetoshi Ito et al. Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information: This is a FIRST submission of items concerning a submission under 35 U.S.C. 371. This is a SECOND or SUBSEQUENT submission of items concerning a submission under 35 U.S.C. 371. This is an express request to begin national examination procedures (35 U.S.C. 371(ft)). The submission must include items (5), (6), (9) and (21) indicated below. The US has been elected (Article 31). A copy of the International Application as filed (35 U.S.C. 371(c)(2)) a. x is attached hereto (required only if not communicated by the International Bureau). b. has been communicated by the International Bureau. is not required, as the application was filed in the United States Receiving Office (RO/US). x An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)). a is attached hereto. has been previously submitted under 35 U.S.C. 154(d)(4). , [x Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) are attached hereto (required only if not communicated by the International Bureau). have been communicated by the International Bureau. have not been made; however, the time limit for making such amendments has NOT expired. have not been made and will not be made. An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). 9 X An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)), 10. An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)). Items 11 to 20 below concern document(s) or information included: An Information Disclosure Statement under 37 CFR 1.97 and 1.98. 12. An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included. 13 X A preliminary amendment. 14 X An Application Data Sheet under 37 CFR 1.76. 15. X A substitute specification A power of attorney and/or change of address letter. 17 A computer-readable form of the sequence listing in accordance with PCT Rule 13ter 2 and 37 CFR 1.821- 1.825. A second copy of the published International Application under 35 U.S.C. 154(d)(4). A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).

This collection of Information is required by 37 CFR 1.414 and 1.491-1.482. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Certificatinally is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to late 15 minutes to complete including galacting-information, repeating, and abundling the completed from the full VEPTO. Time with vary perpending upon the individual case. Any comments on the amount of time you require to complete into from and/or suggestions for reducing his burden, should be sent to the Chell Information Officer, U.S. Patent and Trademark Office. U.S. Department of Commence (P. D. 681 445). Alexanding, V. 262 214-450. D.NOTES SEND. PEES OR COMPLETE DROWN DET IN SCHOOLES SEND. All Stop PCT. Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. Page 1 of 3

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U.S. APPLICATION NO. (If known, see 37 CFR 1.5)			INTERNATIONAL APPLICATION NO.		ATTORNEY'S DOCKET NUMBER	
			PCT/JP2005/0	PCT/JP2005/005312		112857-608
	items or informations PCT/IB/30		4; PCT/ISA/220; PCT	r/ISA/210; PCT	/ISA/237	
The follo	owing fees have b	nean submitted			CALCULATIONS	PTO USE ONLY
				\$300	\$300	THO OCCUREN
						_
If the written opini	ination fee (37 CF ion prepared by IS US indicates all cl	\$200				
All other situation	18					
23. Search fee (37 CFR 1.492(b)) If the written opinion of the ISA/US or the International preliminary examination report prepared by IPEA/US indicates all claims easiety provisions of PCT Ande 33(1)-(4)					\$400	
	TOTAL OF 21. 22 and 23 =				900.00	
□ Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 3 CFR 1.25(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.452(0)). The fee is \$250 for each additional 50 sheets of paper or fraction thereof. Total Sheets □ Extra Sheets □ Number of each additional 50 or fraction					-	
		thereof (round u	p to a whole number)		1.	
- 100 =	/50 =	l		x\$250	\$	
after the date of c	commencement of	the national stag	n fee, examination fee, or the e (37 CFR 1.492(h)).		\$	ļ
CLAIMS	NUMB	ER FILED	NUMBER EXTRA	RATE	\$	
Total claims		- 20 =		× \$50	\$	
Independent clain	ns	-3=		× \$200	\$	
MULTIPLE DEPENDENT CLAIM(S) (if applicable) +			+ \$360	\$		
TOTAL OF ABOVE CALCULATIONS =					\$	
Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/2.						
				SUBTOTAL =	\$	
	\$130.00 for furnisate (37 CFR 1.492	s				
TOTAL NATIONAL FEE =					\$	
Fee for recording by an appropriate	the enclosed ass cover sheet (37	ignment (37 CFR CFR 3.28, 3.31). \$	1.21(h)). The assignment mu 40.00 per property	st be accompanied	\$	
		\$				
					Amount to be refunded:	\$
					Amount to be charged	\$ 900.00

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a. 🔲	A check in the amount of \$ to cover the above	fees is enclosed.					
b. X	Please charge my Deposit Account No. 02-1818 in the amount of \$ 900.00 to cover the above fees. A duplicate copy of this sheet is enclosed.						
c. X	The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 02-1818. A duplicate copy of this sheet is enclosed.						
d. 🗆	Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.						
NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.							
SEND ALL CORRESPONDENCE TO:							
Thomas	s C. Basso	SIGNATURE					
Bell,	Boyd & Lloyd LLC	Thomas C. Basso					
P.O. 1	Box 1135	NAME					
Chica	go, IL 60690-1135	46,541 REGISTRATION NUMBER					